

- 10. (Amended) The method of making a resist pattern according to claim 8 wherein said Levenson phase-shift mask is of a phase-shifter-added-type, and said mask structure is regulated by the thickness of a phase shifter.
 - 11. (Canceled without prejudice)
 - 12. (Canceled without prejudice)
 - 13. (Canceled without prejudice)
 - 14. (Canceled without prejudice)
 - 15. (Canceled without prejudice)

REMARKS

This is in full and timely response to the Office Action of March 12, 2003 (Paper No. 07) requiring a response to an election of invention requirement. In response, the Applicant respectfully elects the invention of Group I, having claims 1 to 10, drawn to a method of making a phase shift mask and a phase shift resist pattern. Non-elected claims 11 to 15 are here canceled without prejudice to their presentation in a divisional application as of right based on this election of invention requirement.

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The claims pending were those submitted in a preliminary amendment, here further amended in minor respects to improve their form, and to avoid a possible indefiniteness argument.

This election is provisionally made and with traverse to preserve any rights the Applicant may have to modify existing claims. It is noted that the reasons supporting the election requirement referred more generally to a product and a process, but it is noted that only process claims are involved.

Early examination on the merits of this application is respectfully requested.

Respectfully submitted,

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APPENDIX I

(MARKED-UP VERSION OF AMENDED CLAIMS)

For the convenience of the Examiner, all of the claims are hereby presented.

1. (Twice-amended) A manufacturing method of a phase-shift mask, comprising:

seeking [the] \underline{a} relationship of optical conditions of an exposure optical system used for exposure and a mask structure with displacement of a pattern to be transferred by exposure;

finding said optical conditions and said mask structure that [can] limit displacement of said pattern within a required range, taking manufacturing errors of the mask into consideration;

examining the optical conditions and the mask structure obtained to determine whether they ensure a required exposure tolerance and a required focal depth; and

executing fabrication of such a mask to obtain said mask structure when the result of the examination is acceptable.

- 2. (Amended) The manufacturing method of a phase-shift mask according to claim 1 wherein said optical conditions include, at least, a numerical aperture and a partial coherence factor.
- 3. (Amended) The manufacturing method of a phase-shift mask according to claim 1 wherein said phase-shift mask is a Levenson phase-shift mask.
- 4. (Amended) The manufacturing method of a phase-shift mask according to claim 3 wherein said Levenson phase-shift mask is of

a substrate-excavation-type, and said mask structure is regulated by the amount of excavation of a substrate.

- 5. (Amended) The manufacturing method of a phase-shift mask according to claim 1 wherein said Levenson phase-shift mask is of a phase-shifter-added-type, and said mask structure is regulated by the thickness of a phase shifter.
- 6. (Twice-amended) A method of making a resist pattern through exposure using a phase-shift mask, comprising:

seeking [the] \underline{a} relationship of optical conditions of an exposure optical system used for exposure and a mask structure of said phase-shift mask with displacement of a pattern to be transferred by exposure;

finding said optical conditions and said mask structure that [can] limit displacement of said pattern within a required range, taking manufacturing errors of the mask into consideration;

examining the optical conditions and the mask structure obtained to determine whether they ensure a required exposure tolerance and a required focal depth; and

when the result of the examination is acceptable, fixing said exposure optical system to the optical conditions selected, then actually manufacturing said phase-shift mask having the mask structure selected, and conducting exposure using said exposure optical system and said phase-shift mask.

7. (Amended) The method of making a resist pattern according to claim 6 wherein said optical conditions include, at least, a numerical aperture and a partial coherence factor.

8. (Amended) The method of making a resist pattern according to claim 6 wherein said phase-shift mask is a Levenson phase-shift mask.

- 9. (Amended) The method of making a resist pattern according to claim 8 wherein said Levenson phase-shift mask is of a substrate-excavation-type, and said mask structure is regulated by the amount of excavation of a substrate.
- 10. (Amended) The method of making a resist pattern according to claim 8 wherein said Levenson phase-shift mask is of a phase-shifter-added-type, and said mask structure is regulated by the thickness of a phase shifter.
 - 11. (Canceled without prejudice)
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 - 14. (Canceled without prejudice)
 - 15. (Canceled without prejudice)